

## *Darwin Initiative Annual Report*

### **Darwin Project Information**

Project Ref Number	13/023
Project Title	Tropical Forest Canopy Training Programme for the ASEAN Region
Country(ies)	Malaysia
UK Contract Holder Institution	Global Canopy Programme
UK Partner Institution(s)	
Host country Partner Institution(s)	Institute of Tropical Biology and Conservation (ITBC), Universiti Malaysia, Sabah
Darwin Grant Value	£107,553
Start/End dates of Project	1 <sup>st</sup> Oct 2004 – 30 <sup>th</sup> March 2007
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1st April 2006 – 30 <sup>th</sup> March 2007
Project Leader Name	Andrew Mitchell
Project website	<a href="http://www.globalcanopy.org/training">www.globalcanopy.org/training</a>
Author(s), date	John Pike, April 2007

### **1. Project Background**

The significance of forest canopies for biodiversity conservation is still poorly understood. Many threatened species (e.g. orangutans, hornbills) are almost impossible to study from the ground. Ozanne et al 2003 (Science 301:183-186) states that ‘..forest canopies are among the most species-rich yet most highly threatened terrestrial habitats’, ‘..they support about 40 % of extant species of which 10% are predicted to be canopy specialists’ and ‘..the forest canopy is the functional interface between 90% of Earth’s terrestrial biomass and the atmosphere’. Human capacity for canopy investigation is limited in biodiversity rich countries. To overcome the structural complexity and the height of the canopy, specialized training is required in access methods and experimental design. The project will build local capacity in canopy research and conservation training so that researchers, forest managers and conservationists in Malaysia and the ASEAN region can, in future, be trained locally to meet these challenges.

The purpose of the project is to build human capacity in Malaysia and other biodiversity rich nations in the ASEAN region for investigating forest canopy biodiversity, its conservation, function, value and policy context. The outputs of the project as provided in the logical framework in are: Forest canopy research and conservation field course developed and established at University of Malaysia Sabah, Human capacity for training in canopy research and conservation developed, Canopy training manual for the field course produced, New leaders in canopy science and conservation trained, Agreement of relevant national and regional institutions on a strategy for canopy training in the region.

## Location

The training programme is run in Danum Valley Conservation Area, Sabah, Malaysia with this location forming a hub for the wider ASEAN region.



Danum Valley Conservation Area

## 2. Project Partnerships

The partnership between the GCP and the local host institution, the Institute of Tropical Biology and Conservation (ITBC) at the Universiti, Malaysia, Sabah has continued to be strong this year. During the year the GCP have continued to work closely with Professor Maryati Mohd., Dr Henry Bernard and their staff to develop this project and bring a number of its outputs to conclusion. In addition, the GCP has continued its collaborative work with UMS on a large-scale UNEP project proposal and has begun another Darwin Initiative funded project jointly with ITBC.

Through the development of human capacity in canopy access and canopy science, and the development of new MSc level courses in canopy science, the partnership between the GCP and UMS is greatly enhancing the ability of Malaysia (alongside other relevant ASEAN region countries) to meet their commitments to the CBD in the area of forest canopy biodiversity.

A number of other local partners have supported the project this year; The Royal Society South East Asian Rainforest Research Programme (SEARRP) have provided staff, logistical and ground support to the training courses in the field, greatly enhancing the quality of the training and the ease of logistics during the project. In addition, Glen Reynolds, the SEARRP Science Manager, has been an invaluable ally in Sabah, providing an important go-between for logistical issues. Without SEARRP research assistants at Danum Valley, the project would be very difficult to run in the field. The quality of support from these research staff has been excellent and we have been extremely grateful for their expertise. SEARRP have also provided all transport and organised accommodation during the courses this year. The success of this project and the excellent relationship it has built with SEARRP has been crucial to the decision of the GCP to embark on another Darwin Initiative funded project working closely with the same team.

Yayasan Sabah, the other local partner in the project has provided Danum Valley Field Station accommodation, permits and support.

### 3. Project progress

#### 3.1 Progress in carrying out project activities

##### Project Achievements

The project has achieved two major outputs during the last year:

- 1) The third Sabah Canopy Training Course was completed in Danum Valley Field Centre, Sabah with the science manual utilised during the science training elements
- 2) A new Canopy Science module on the UMS MSc programme was formalised and agreed by the university senate.

##### Summary of progress *in activities* against project outputs

Only one major activity was scheduled this year:

##### **Output 1: 'Forest Canopy Research and Conservation field course established at university of Malaysia, Sabah'**

Activity: Third Canopy Field Course run in Danum Valley Conservation Area, Sabah,

A four-week canopy training course was run from 8<sup>th</sup> January to 3<sup>rd</sup> February 2007. The course successfully provided instructor-level canopy access training for 6 returning ASEAN region trainee Instructors. The course also trained 22 ASEAN region scientists, students and researchers. Climbing training was again provided by James Aldred and John Pike of Canopy Access Ltd. Science training was provided by 5 returning science trainers from UMS alongside inputs from Professor Roger Kitching, Griffith University.

The course ran as expected at the agreed time but was extended by 1 extra week to ensure all the budgeted training had been successfully carried out.

#### 3.2 Progress towards Project Outputs

##### **Output 1 (Building human capacity in Malaysia to study forest canopy biodiversity, its conservation, function, value and policy context), Output 2 (Forest canopy research and conservation field course established at University of Malaysia, Sabah), and Output 4 (New leaders in canopy science and conservation trained)**

All of these outputs have been addressed this year during the third canopy field course

The third Darwin Initiative funded course in canopy science and access took place in Borneo between the 8<sup>th</sup> January and 3<sup>rd</sup> February 2007. Course staff from the GCP, Canopy Access Ltd (CAL) and Griffith University joined local collaborators from Universiti Malaysia Sabah (UMS) to provide basic access (BCAP) and science training to 20 scientists, students and research assistants from Malaysia, Brunei and Indonesia. 6 trainee access trainers also returned from the second course to undergo instructor level access training (ICAP) and to teach the BCAP training under direct supervision from CAL instructors. 10 Science trainers from UMS also attended the course at different times to assist with the science teaching.

The course was again a great success this year despite an outbreak of chicken pox during the first week which resulted in 2 of the potential trainee climbing trainers missing the course. All candidates passed the formal practical and theoretical exams to achieve the BCAP qualification as well as conducting successful assessed science projects.

### **Summary of achievements for each group of trainers and trainees**

#### 1. Local canopy climbing trainee instructors

A total of 5 trainee climbing instructors returned to the course to undertake instructor level training. Of these, 2 were from UMS and 3 were Royal Society RAs from Danum. During the first week of the course, 2 of the trainee climbing instructors contracted chicken pox and were unable to complete their training. This meant that only 3 instructors were able to carry out the training and to teach the BCAP courses. These 3 trainee climbing instructors underwent one week of rope access training, recapping advanced skills such as re-belay rescues, tensioned high line rigging and complex rescue scenarios. They were taught a number of extra techniques necessary to enhance their competence in teaching and were given the opportunity to refresh all of the old skills learned over the last two years. During the following three weeks each trainee instructor took complete responsibility for the training of 10-12 new BCAP students under the direct supervision of CAL staff. At the end of each course the students and instructors were assessed for competence.

The quality of the training provided on the first BCAP course by the trainee instructors disappointing and only average at best. 50% of the students under their care failed their initial assessments and required further training and subsequent reassessment. The trainee instructors found the experience of teaching complex and tiring but learnt a great deal about the nature of teaching canopy access to novices in a rainforest environment. Seeing the first time failure rate of their students catalysed them to reassess their teaching styles and the degree of effort required to stimulate and teach such a diverse group. By the second week of BCAP training, and following a lengthy debrief by CAL staff, teaching quality had greatly improved and a first-time pass rate approaching 75% was achieved.

In October and November 2006, the GCP funded two of the trainee climbing trainers from this project to attend an international canopy science experiment in Australia. Kalsum Mohd Yusah and Daniel Pamin, both from UMS, spent 2 weeks carrying out canopy fieldwork with canopy biodiversity specialists from around the world during IBISCA Queensland, a pioneering experiment investigating the potential impact of climate change on the rainforest canopy. Daniel and Kalsum were joined in Australia by John Pike, the GCP Training Manager, who provided 2-days of project specific training in Australian rainforest aimed at expanding Kalsum and Daniel's climbing skills, provide them with experience of a new forest type and preparing them for the upcoming course in January. Kalsum was interviewed for the Queensland Government magazine whilst working on the IBISCA project. A copy of the article can be found in appendix 2.

#### **Likelihood of meeting the goals and outputs of the project in this area**

1) It is the opinion of the climbing specialists who have run this project, that, despite best efforts to create opportunities, not enough experience in climbing is being gained by the trainee climbing instructors in between courses and that consequently they **do not yet have enough experience to run access courses on their own.**

2) The difficulties involved in recruiting suitably fit, enthusiastic, calm and appropriate trainee access instructors at the start of the project were underestimated meaning that the numbers actually trained were lower than anticipated. In addition, it is now clear that research assistants (whose job it is to carry out and support field research and are based in a field centre with access to continued practice and experience) make much better climbing instructors than researchers because they are able to fully engage in the process, gain regular experience between courses, and are not so encumbered by weighty academic and administrative loads.

3) The outbreak of chicken pox at Danum Valley during this final year of training removed two of our trainee instructors from the course. This has effectively cut the trained team from 5 to 3 which we consider to be too small a number to effectively run an annual course.

### **Impact and solutions to these issues**

The project has not yet met its outputs in providing a team of canopy access trainers who are capable of independently training novices in canopy access techniques to BCAP standard. CAL staff will give extra training during 2007 to the Danum Valley research assistants who were unable to participate in the course this year. ***The GCP is also seeking small-scale funding to send CAL training staff to supervise the first independent field course in 2007.***

## **2. Malaysian canopy science trainers**

Nine Malaysian science trainers returned to the course this year to provide teaching inputs. In addition, all of the previous year's trainers have provided inputs to the manual and have been kept involved in the progress of the course through updates and the workshop in Kota Kinabalu during September. Two-weeks of science training in Borneo were led by Dr Henry Bernard from UMS with teaching inputs from Dr Zulman, Dr Susan Benedick and Nasir Abd Majid, Dr Kueh Boon Hee, Dr Francis Peters, Dr Alona Linatoc, Dr Idris Said and Dr Homathevi Rahman. Small research training projects were planned by students under the supervision of these staff. All trainers have committed themselves to providing further inputs to the course in future years.

Over the last three years a large number of researchers and lecturers from UMS have participated in both the science and access components of this programme, with many even gaining their BCAP qualification. The course has greatly benefited from the teaching inputs provided by these returning staff over the last two years. Through the supervision of Prof. Kitching and Dr Morison and the exposure to canopy science brought by the course, a well-trained team of canopy science trainers has been created. These trainers have gained a lot of experience from the course, having an especially acute understanding of the feasibility and difficulties of working in the canopy gained through practical experience.

## **3 Canopy science trainees**

19 students from UMS, Peninsular Malaysia and Indonesia were trained to BCAP level on this year's course. In total, over the three years of the course, 59 students have been trained in addition to the trainee science instructors. The project has achieved all outputs in this area.

### **Other implicit outputs within project purpose**

#### Field Course established on curriculum of UMS (Output 21)

Following the development of a canopy module during meetings in January 2005 and revisions at the Kota Kinabalu workshop in September 2005, a draft canopy module was submitted in November 2006 to the UMS senate for approval. The module was ratified and passed by the university senate in September 2006 and will now be available for credit for 2007 entry onwards. This is a wonderful achievement for UMS and represents the first MSc level canopy science module available anywhere in the world. The existence of the course on the university syllabus is a crucial step to achieving a strong lasting legacy for the project. The canopy science field course now has an official university context in which to run in future years.

### Annual Canopy Fellows Newsletter produced and disseminated (Output 16A)

The second Canopy Fellows newsletter entitled 'Branching Out' was produced during August 2006 and was emailed to all course participants and posted on the GCP website. The 2006 newsletter can be found in appendix 2b. In addition, this project is discussed in the GCP annual report which can also be found in the appendix.

### **3.3 Standard Output Measures Project Standard Output Measures**

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	TOTAL
Established codes						
6A	<i>Training of 15 ASEAN researchers to be canopy science trainers</i>	15	15 <i>(continuation from previous year)</i>	10		15
6A	<i>Training of 3 ASEAN region researchers to be canopy science trainers</i>	3	2 <i>(continuation from previous year)</i>	0		3
6B	<i>3 week canopy field course held</i>	3 weeks	4 weeks	4 weeks		11
6A	<i>A total of 48 personnel trained in canopy research, conservation &amp; access methods</i>	18	22	19		59
15B	<i>2 publicity articles in University and Sabah Institution Magazines</i>	1	1	1		2
18C	<i>Television news reports in host country</i>		2	0		3
19C	<i>Radio news reports in host country</i>	1	1	1		3

**Table 1 Publications**

Type *	Detail	Publishers	Available from	Cost £
(eg journals, manual, CDs)	(title, author, year)	(name, city)	(eg contact address, website)	
Newspaper	'UMS takes the lead in canopy studies' 7 <sup>th</sup> March 2007	Sabah Times, Malaysia	John Pike, GCP	-
Newsletter	'Climate Change Detectives' December 2006	'Catalyst' – Newsletter of the Queensland Government	<a href="http://www.smartstate.qld.gov.au/resources/publications/catalyst/2006/issue_20/images/Catalyst_dec06.pdf">http://www.smartstate.qld.gov.au/resources/publications/catalyst/2006/issue_20/images/Catalyst_dec06.pdf</a>	-

### 3.4 Progress towards the project purpose and outcomes

This project has successfully met all of its outputs to date, although further work is required to bring the access instructors to a higher level of ability.

#### Progress against Measurable Indicators for project purpose

##### A nationally recognised canopy research and conservation field course established in Sabah, Malaysia.

This project has been successful against these indicators. A nationally recognised canopy course has been established in Sabah, forming a hub for the ASEAN region. Through the work of UMS and the GCP alongside the excitement and enthusiasm of the course participants, knowledge of the existence of the course has spread around the region. During the course all partners worked hard to ensure that as many different institutions from as many different countries as possible were engaged, thus increasing the impact and legacy of the course. In addition, due to the existence of trained canopy technicians and climbing equipment, Danum Valley and UMS have become important research sites for canopy studies and students from around the world are being attracted to them specifically because of their ability to carry out canopy studies. We therefore believe that an internationally recognised course has been created in Sabah with strong lasting legacy for the future.

##### Trainers trained and potential leaders in canopy science and conservation trained.

Over the three years of the project a team of new trainers in canopy science and canopy access have been trained. Although there is still some work to carry out to enhance the ability of the climbing trainers, the project has formed a strong and cohesive team of science and access trainers who can continue to run the course within the context of the new canopy biology module at UMS. The course is ensured a lasting legacy and potential new leaders will continue to be trained each year thanks to the project.

### 3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The project is likely to contribute significantly to knowledge of threatened canopy biodiversity in ASEAN region countries and to have future positive impacts on the canopy ecosystem. These effects are unlikely to be directly measurable due to the nature of the project. As this is a capacity building project it has furnished scientists, students and conservationists with the skills necessary to effectively access and study one of the most biodiverse but poorly known habitats on earth. The legacy of the project is that this training will now continue to create new opportunities for canopy science for the region, training scientists and students each year as part of the formal MSc curriculum.

## **Monitoring, evaluation and lessons**

As for previous courses, student feedback was received during a final session of each course. Feedback was broadly positive about the course and its usefulness for research and the only negative feedback was related to weather problems and accommodation details which were outside of the control of the project staff.

Monitoring of the project itself, of achievements in relation to project purpose, sustainability of the course and project legacy, is currently being carried out in Sabah. UMS are preparing their own evaluation report for submission as part of the final Darwin report. A local UK researcher, independent to UMS but based in Sabah has been commissioned to undertake an evaluation report. This is currently being prepared and will be submitted with the final Darwin Initiative report in June.

### **4. Other comments on progress not covered elsewhere**

The project design has not been significantly altered during the last year although the exit strategy for the project has required some modification. Due to the issues highlighted in 3.2 (above) further supervision is necessary to ensure that canopy access trainers achieve high levels of ability. Training staff from CAL will attend the first UMS run canopy training programme following the end of Darwin funding to provide supervision and extra training for the access instructors. This will ensure that a well-trained team of instructors is in place in Sabah for future years of the course.

### **5. Sustainability**

As discussed in section 3.4, the Sabah Canopy Training School has become internationally recognised and the profile of the project within Sabah seems to be high. Press attention in previous years has been good with a large number of newspaper articles printed in the local press. In previous years visits to Malaysia have been made by the project leader and Director of the GCP, Andrew Mitchell and a series of talks and visits in Sabah and Peninsular Malaysia by the GCP project manager John Pike & Professor Roger Kitching. Many new institutions and individuals have been made aware of the project through these visits. As reported in previous reports, the ASEAN regional workshop in Kota Kinabalu, funded by the Darwin Initiative, received a large amount of press attention and was opened by the Deputy Chief Minister of Sabah who gave a very positive and supportive speech.

This project has also been important in laying the ground-work for two new projects: The GCP has recently begun work on another Darwin Initiative funded project investigating wild cats in Borneo (Ref 15-026). This project would not have been possible unless trained canopy technicians and the associated infrastructure had been present in Danum Valley. The Sabah Canopy Training School has also build many of the foundations for a large-scale GCP project, currently in development to establish a whole forest observatory at Danum Valley as part of a pan-tropical research network funded by UNEP. The first step to establishing a large-scale canopy research project in any biodiversity-rich area is to build the grass-roots capacity and legacy of canopy science. The three years of training courses in Sabah have achieved this and greatly increased the potential impact of the Whole Forest Observatory project due to start in 2008.

#### **Enhancing the capacity of Danum Valley Field Centre**

Training staff at Danum Valley and UMS in canopy access techniques, and the provision of equipment at Danum Valley Field Centre (DVFC) has led to a large increase in the amount of canopy work that is being carried out in Borneo. 3 large-scale research expeditions have visited Danum this year to work in the canopy and many studies already taking place at the field centre have added canopy components to their projects. In addition, many of the students who have attended the courses have expressed interest in continuing canopy research in their own institutions. The comradeship built up by students on the course ensures that contact is



not lost and the potential for new interdisciplinary projects is great. The GCP is also working to keep all participants engaged and talking to each other through a graduates area of the website and a biannual newsletter 'Branching Out'

### **MSc Canopy Science module at UMS**

The MSc canopy module developed as a result of the project has now been approved by UMS and will be available for credit from this year. The module will now be eligible for state funding, and consequently it is hoped that this will ensure the sustainability of the course in future years.

The profile of canopy science in the region has been significantly enhanced by this project. Many of the course graduates from the ASEAN region are now building canopy science projects within their own countries, most notably in the Phillipines and China where training courses are in development. Sabah continues to strengthen capacity in canopy biodiversity research and conservation through this project and is emerging as a world-leader in canopy science due in a large part to this project.

### **6. Dissemination**

Dissemination activities over the last year have been handled by UMS, the aim being to inform and involve as many institutions within the ASEAN region as possible. This process will continue after the project has finished and the course will be open to ASEAN students.

### **7. Project expenditure during the reporting period**

Item	Budget (please indicate which document you refer to if other than your project schedule)	Expenditure	Balance
Rent, rates, heating, overheads etc	887	789.54	97.46

The budget for this project shows an overspend on specialist climbing instruction. This is due to the running, for the second year, an extra advanced course for trainee climbing instructors that had not been anticipated in the original project plan, along with an increase in the climbing instructors' insurance premiums and consequent costs. These changes were discussed with the Darwin secretariat prior to last year's course. A significant underspend occurred on project management due to an inputting error in the original project cashflow which has only now been uncovered. This seems to have been the source of the underspends shown in previous reports. In addition, part of the cost of the extra climbing course this year has been funded from GCP core funds. We have claimed only £29,589.74 of the £30,184.00 budgeted.

**8. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes**

[I agree for ECTF and the Darwin Secretariat to publish the content of this section](#)

This project has created an ASEAN centre for canopy science in Sabah and is already attracting canopy scientists from all around the region and the wider world. The new Canopy Ecology module on the MSc curriculum at UMS is the first of its kind in the world and represents the strength of commitment of UMS to become a leader in this field. The influence of this course has spread quickly around the ASEAN region and engaged scientists and students in a wide range of institutions, spreading the excitement and possibilities of canopy science to a new generation and paving the way for integrated canopy research in the future. One of the major impacts of this project is that Danum Valley field station has become a well-known hotspot for students and scientists wishing to study the canopy of pristine primary rainforest. The provision of equipment and trained climbing instructors at the field station has opened the door to the canopy for many researchers.

This project has changed canopy science in the ASEAN region from a poorly understood and only rarely undertaken area of research, to a cohesive and discrete area of study. Where there were few opportunities, no training and few specialists there is now a committed team of well-trained and motivated staff capable of training and inspiring new generations of canopy scientists.

This project has left a great legacy in building the knowledge and ability to carry out canopy research of institutions within the ASEAN region. Its effects will continue to spread as the course continues in the following years in its official position on the university curriculum.

## Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2006/07

Project summary	Measurable Indicators	Progress and Achievements April 2006 - March 2007	Actions required/planned for next period
<p><b>Goal:</b> <i>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve</i></p> <p><i>The conservation of biological diversity,</i></p> <p><i>The sustainable use of its components, and</i></p> <p><i>The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources</i></p>		<p><i>Although not directly measurable, the course has greatly increased the capacity of scientists from the ASEAN region to study the previously poorly known and threatened biodiversity of the rainforest canopy.</i></p>	<p><i>(do not fill not applicable)</i></p>
<p><b>Purpose</b> <i>Build human capacity in Malaysia and other biodiversity rich nations in ASEAN region for investigating forest canopy biodiversity, its conservation, function, value and policy context.</i></p>	<p><i>A nationally recognised forest canopy research and conservation field course established in Sabah, Malaysia.</i></p> <p><i>Trainers trained</i></p> <p><i>Potential leaders in canopy science and conservation trained</i></p>	<p>A nationally recognised forest canopy research and conservation field course established in Sabah, Malaysia. Trainers trained Potential leaders in canopy science and conservation trained. Canopy Science module developed and formalised on UMS curriculum, Wide range of ASEAN institutions involved over the three years of the project.</p>	<p>Darwin funding has finished for this project. Activities next year will focus on bringing the climbing instructors up to a higher level of ability and building on the legacy of the project in continuing to expand the capacity of Sabah as a hub for canopy science in the ASEAN region.</p>
<p><i>Forest canopy research and conservation field course developed and established at university of Malaysia, Sabah</i></p>	<p><i>Field Course structure and content developed</i></p>	<p>The course is now established on the university curriculum at MSc level and is open for credit for students from UMS and around the region.</p>	
<p>Field Courses held in 2006, 2007, each involving a minimum of 20</p>		<p>Field courses successfully run in 2006 and 2007. The 2006 course trained 22</p>	

<p>students, 5 climbing professionals, 10 Malaysian trainers and 2-5 UK scientists</p>	<p>students and the 2007 course trained 19 students. Both courses involved 2 UK scientists and benefited from 10 and 12 Malaysian trainee trainers (both climbing and science) respectively.</p>	
<p><i>Human capacity for training in canopy research and conservation developed.</i></p>	<p><i>10 local scientists and 6 climbers commit to forming a team of canopy trainers and receive training for trainers in canopy access, research methods and conservation.</i></p> <p><i>A minimum of 10 ecology teaching staff from outside Malaysia <u>trained in 04-06.</u></i></p> <p><i>Minimum of 20 potential ecology trainers trained on the field course.</i></p>	<p>10 local scientists and 5 climbers have committed to forming a team of canopy trainers. They have been involved with the course for its entire 2 year duration and are now able to run the course with only minimal input. Following further training of the trainee climbing trainers during 2007 this team will be completely independent.</p> <p>11 teaching staff from outside Malaysia have been trained on this project during the three courses. Including the 10 local scientists trained in year one, 21 teaching staff have been trained on this project.</p>
<p>1 week field course held for team of 6 technicians in canopy access methods that meet UK safety standards. 2 week field course held in canopy access and research for local and ASEAN region canopy research trainers. On-the-job training for both groups in '06 and '07</p>	<p>These activities have been carried out as planned although extra weeks of training were held during 2006 and 2007 to ensure quality of results. On-the-job training was held as expected in addition to these extra training weeks.</p>	
<p><i>Canopy training manual for the field course produced.</i></p>	<p><i>Draft manual in local language prepared, presented to workshop, approved and later finalised and printed.</i></p>	<p>Draft manual was produced in 2006, ratified and finalised at the KK workshop in 2005 and then translated into Malay and printed for use on the course in January 2007. This is a valuable resource for the course.</p>
<p><i>Draft manual produced in 2005. Ratified at workshop in '05 and tested on field course in '06. Finalised and printed by July '06.</i></p>	<p>Draft manual was produced in 2006, ratified and finalised at the KK workshop in 2005 and then translated into Malay and printed for use on the course in January 2007. This is a valuable resource for the course.</p>	

<p><i>New leaders in canopy science and conservation trained.</i></p>	<p><i>Minimum of <u>60</u> people trained in Malaysia in aspects of canopy science and its broader policy and conservation context.</i></p>	<p>A total of 74 people have been trained on the course in Malaysia in aspects of canopy science and its broader policy and conservation context. This includes all students on the course, including the science trainers. In addition, the workshops carried out at UMS in 2005 and the extra related dissemination activities in 2006, have engaged many more people than were able to actually carry out the formal training.</p>
<p><i>In-country project planning workshop in Malaysia in Oct 2004. Regional 3-day workshop held in Sept 2005.</i></p>		<p>This workshop was carried out in 2005. Outputs can be found in previous project reports.</p>

### ***Checklist for submission***

	Check
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<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number.	
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